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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,213	02/28/2002	Shinichi Sato	11301-1481	8571

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
100 GALLERIA PARKWAY, NW
STE 1750
ATLANTA, GA 30339-5948

EXAMINER	
SERGENT, RABON A	
ART UNIT	PAPER NUMBER

1711

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,213

Applicant(s)

SATO ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/242,525.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/24/04, 1/24/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Claims 48 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The process as it pertains to compound (i) is indefinite, because it is unclear how to interpret the language, “reacting a compound (eb) with a compound (fb), or reacting a compound obtained by reacting a compound (eb) with a compound (fb), with a compound (i)”. Specifically, it is unclear how compound (i) relates to the language, “reacting a compound (eb) with a compound (fb)”. Is it proper to read one embodiment of the language as reacting a compound (eb) with a compound (fb) with a compound (i)? If so, then the language is grammatically ambiguous.

2. Claims 46-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout the claims, the language, “having less than two”, renders the claims indefinite, because it cannot be clearly determined if or under what circumstances the language is to encompass or represent zero. Applicants’ argument that “having” mandates a value higher than zero in no way clarifies the issue.

3. Claims 46-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Applicants have failed to provide enablement for the claimed reactions when the “having less than two” language of the claims is interpreted as meaning zero. Such an interpretation calls into question whether the respective compounds are functional.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barron et al. ('844) or Zwiener et al. ('955).

Barron et al. disclose the production of curable urethane compositions wherein an isocyanate terminated prepolymer, derived from the reaction of a polyol with a polyisocyanate, is reacted with the reaction product of an aminoalkylalkoxysilane and a carbonyl or nitrile containing compound. See column 1, lines 50+; column 2, lines 59+; and column 3, lines 37-56.

Zwiener et al. disclose the production of alkoxysilane-functional polyurethane prepolymer, wherein an isocyanate terminated prepolymer, derived from the reaction of a polyol

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and a polyisocyanate, is reacted with the reaction product of an aminoalkylalkoxysilane and a maleic or fumaric acid ester. See column 2, lines 24+ and examples 6-9.

6. Applicants' process differs from the prior art processes in that applicants react the isocyanate with the amine functional alkoxysilane adduct to yield an isocyanate functional intermediate which is then reacted with the polyol, as opposed to reacting the isocyanate functional prepolymer with the adduct. The position is taken that the respective processes yield the same product and the only difference amounts to how the polyol is incorporated into the final product. This situation is considered to be analogous to changing the sequence of steps in a multi-step process, and it has been held that such a modification is obvious where an unexpected result is not obtained. *Ex parte Rubin* (POBA 1959) 128 USPQ 440; *Cohn v. Comr. Pats.* (DCDC 1966) 251 F Supp 378, 148 USPQ 486. Therefore, the position is ultimately taken that it would have been *prima facie* obvious to modify the reaction sequence of the prior art so as to arrive at the instant process.

7. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krafcik ('604).

Patentee discloses the reaction of an isocyanate functional material, a polyol, and an aminoalkyl silane, wherein the reaction is conducted by reacting the isocyanate functional material with the polyol to yield a product, which is then reacted with the aminoalkyl silane. See abstract; column 2, lines 30+; column 4, lines 37+; and column 5, lines 31+. Patentee further teaches at column 5, lines 24-30 that other processes may be employed to produce the composition of the reference.

8. While the prior art sequence of reaction differs from applicants, the position is taken that the same products are being produced. Therefore, since patentee teaches that different processes

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may be employed to produce the product, and since it has been held that changing the sequence of steps in a process is obvious where an unexpected result is not obtained (*Ex parte Rubin* (POBA 1959) 128 USPQ 440; *Cohn v. Comr. Pats.* (DCDC 1966) 251 F Supp 378, 148 USPQ 486), the position is taken that it would have been obvious to modify the disclosed reaction sequence, so as to arrive at the instant process.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent
March 30, 2005